

REMARKS

Claims 40-62 were pending in this application when last examined. Claims 52-57 are withdrawn. Claims 40-47, 50, 51 and 60 are currently amended, claims 48-49 have been canceled and new claims 63-65 have been added.

Support for the amendments can be found in the specification and original claims as filed. No new matter has been added.

Claim Objections

At page 3, the Office Action objects to claims 40-51, 59 and 60 because of informalities. The currently amended claims address each of the issues noted in the Office Action. The amended claims include italicized terms where appropriate and the grammatical issues and typographical errors have been corrected.

Claim Rejections-35 USC §112

At page 4, the Office Action rejects claims 40-51 and 58-62 under 35 U.S.C. §112, second paragraph, for being indefinite. Applicants respectfully traverse the rejection.

The currently amended claims address the issues noted in the Office Action. In particular, the term "the latter" has been clarified. Each of claims 40-51 and 58-62 satisfies the requirements of 35 U.S.C. §112, second paragraph. Accordingly,

Applicants request reconsideration and withdrawal of the rejection.

Claim Rejections-35 USC §103

At page 6, the Office Action rejects claims 40-46, 48, 49, 58 and 62 under 35 U.S.C. §103(a) as being unpatentable over SIGOILLET et al. (World Journal of Microbiology & Biotechnology, 1999) in view of RECORD et al. (European Journal of Biochemistry, 2002), RIGAUT et al. (Nature Biotechnology, 1999), KSR v. Teleflex (550 US 398, 2007), and the evidentiary reference of HERPOEL et al. (FEMS Microbiology Letters, 2000). Applicants respectfully traverse the rejection.

The present claims are directed to methods for preparing a recombinant protein that includes overexpressing a gene encoding for the recombinant protein in monokaryotic strains of filamentous fungi of species *Pyncoporus*. The expression of the gene for the protein is under control of the pLac3 promoter represented by SEQ ID NO: 3. The methods also include inducing the promoter to express the gene. The combination of SIGOILLET, RECORD and RIGAUT, in view of KSR and HERPOEL, fails to teach or suggest such methods.

First, SIGOILLET describes the native laccase production by a monokaryotic strain of *Pyncoporus cinnabarinus*. SIGOILLET, however, fails to teach or suggest anything about the *Pyncoporus cinnabarinus* laccase promoter pLac3 as featured in the

present claims. Indeed, the applicants determined for the first time the nucleic acid sequence of pLac3 and characterized its properties as an inducible promoter.

Second, one of ordinary skill in the art would have no reason or suggestion from the prior art to choose the pLac3 promoter for controlling the expression of recombinant protein in *Pyncoporus* fungi. There are numerous factors, not only the promoter selection, which determine protein expression efficiency. Also, not all promoters of *Pyncoporus* proteins are suitable for protein overexpression.

Furthermore, the methods include inducing the pLac promoter. The cited references fail to teach or suggest to one of ordinary skill to utilize an inducible gene expression system as featured in the presently claimed methods.

The secondary reference RECORD merely provides another example of an expression vector that utilizes the *A. nidulans* gpd promoter. The Office Action recognizes that the gpd promoter is a constitutive promoter. In distinction from RECORD, the presently claimed method features an inducible promoter.

The remaining references fail to remedy these primary deficiencies of SIGOILLET and RECORD. Thus, the combination of SIGOILLET, RECORD and RIGAUT, in view of KSR and HERPOEL, fails to teach or suggest, and does not render obvious, present claims 40-46, 58 and 62. Claims 48 and 49 have been canceled.

Accordingly, Applicants request reconsideration and withdrawal of the rejection.

Conclusion

In view of the amendment to the claims and the foregoing remarks, this application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Please charge the fee of \$52 for the one extra dependent claim being paid online simultaneously herewith by credit card.

The Commissioner is hereby authorized in this, concurrent, and future submissions, to charge any deficiency or credit any overpayment to Deposit Account No. 25-0120 for any

additional fees required under 37 C.F.R. § 1.16 or under 37
C.F.R. § 1.17.

Respectfully submitted,

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